

SPECIFICATION AMENDMENTS

1. In the section beginning on page 5, line 15, please make the following changes:

Figure 9 is a diagram of an alternate 2nd winding for an on-chip multi-tap transformer balun or inductor in accordance with the present invention.

Figure 10 is a schematic diagram of the alternate 2nd winding for an on-chip multi-tap transformer balun or inductor of Figure 9, in accordance with the present invention.

2. In the section beginning on page 5, line 19, please make the following changes:

Figure 1 is a schematic diagram of an on-chip multi-tap transformer balun 10 that is operably coupled to convert a single ended input signal 16 into a 1st differential output signal 18 and a 2nd differential output signal 20. The transformer 10 includes a 1st winding 12 and a 2nd winding 14. The 2nd winding includes a 1st portion 90 and a 2nd portion 92 each of which includes two nodes and a tap. The common nodes of the 1st portion 90 and 2nd portion 92 of the 2nd winding 14 are operably coupled to a reference potential (e.g., AC ground). The taps of the 1st portion 90 and 2nd portion 92 of the 2nd winding 14 are operably coupled to produce the 2nd differential output signal 20 across the 3rd portion 94 and 4th portion 96 of the 2nd winding 14. The 1st nodes of the 1st and 2nd portions, 90 and 92, of the 2nd winding 14 are operably coupled to produce the 1st differential output signal 18.

The taps are symmetrical with respect to the node coupled to the AC ground reference potential. The 1st and 2nd portions, 90 and 92, of the 2nd winding 14 are symmetrical to each other such that balance differential output signals 18 and 20 are produced. The turns ratio between the 1st winding 12 and the 2nd winding 14 depends on the desired gain to be achieved via the transformer. For example, the primary winding may consist of two turns while the 2nd winding consists of nine turns. As one of average

skill in the art will appreciate, other combinations of turn ratios may be used to provide a desired gain. As one of average skill in the art will further appreciate, in many applications, only one set of the differential outputs will be used at a given time.

3. In the section beginning on page 8, line 28, please make the following changes:

As shown, the 1st portion includes a 1st tap and a 2nd tap and two nodes. The 2nd portion includes a 1st node and 2nd node and two taps. The bridges are used to couple the various windings together and to maintain symmetry of the 2nd winding 80.

Figure 10 is a schematic diagram of the on-chip multi-tap transformer balun or inductor of Figure 9, in accordance with the present invention. This schematic contains many common elements of Figure 1 that are referred to by common reference numerals. In addition, 3rd differential output signal 122 is generated across a 5th portion 150 of the 2nd winding 14 between the reference potential 40 and the 2nd tap 140 of the 1st portion 90 and a 6th portion 152 of the 2nd winding 14 between the reference potential 40 and the 2nd tap 142 of the 2nd portion 92.